Author Index of Volume 151

Biographic notes about the authors concerned can be found on p. 199 or p. 407.

Adachi, K., 291
Allen, C., 323
Arndt, G., 143

Ball, A., 87, 323
Bhat, M. V., 123
Budinski, K. G., 203
Bundschuh, W., 175

Chen, Q., 77
Chen, Z., 77
Clayton, P., 255
Cooper, J. R., 391
Crook, P., 337

Dang, H., 111
De Souza, U. J., 157
Deheri, G. M., 123
Devanathan, R., 255
Dowson, D., 391
Doyle, R. A., 87

Fang, L., 313
Fang, X. D., 143
Fisher, J., 391

Gahr, K.-H., 175
Gao, L., 111
Geng, G. Q., 351

Hamdy, M. M., 35
He, B., 13
Hokkirigawa, K., 219, 279, 291
Huang, C., 111

Iwabuchi, A., 301

Kano, M., 229
Karamis, M. B., 23
Karmakar, S., 269
Kato, K., 279, 291
Kausch, H. H., 129
Kitsunai, H., 279
Kossa, S. S., 49

Lashmore, D. S., 245
Lavielle, L., 63
Levy, A., 381
Levy, A. V., 337, 351, 365
Li, Y. J., 313
Liebhard, M., 381
Liu, W., 111
Liu, Y., 365

Marcus, K., 323

Odabas, D., 23

Prasad, B. K., 1
Prasad, S. V., 1

Qui, C., 119

Rack, H. J., 157
Rao, Q., 13
Rosenfield, A. R., 403
Roulin, A. C., 129
Ruff, A. W., 245

Schelling, A., 129
Sethuramiah, A., 269
Shao, E., 77
Sherif, H. A., 49
Subramanian, C., 97

Tanimoto, I., 229
Tsumaki, N., 279

Wang, A., 157
Wang, B. Q., 351
Wang, J., 111
Wang, Z., 77
Wu, D., 77

Xiao, H., 77
Xu, S., 119

Yang, Z., 119
Yao, Y., 143

Zhou, Q., 13
Zhou, Q. D., 313

Elsevier Sequoia, Lausanne

Subject Index of Volume 151

Abrasion
abrasion-induced microstructural changes during low stress abrasion of a plain carbon (0.5% C) steel, 1
explanation of the relation between wear and material hardness in three-body abrasion, 313
study of the impact fatigue resistance of grinding balls matrices and retained austenite, 13
Acetabular cups
birefringent studies of polyethylene wear specimens and acetabular cups, 391
Adhesion
polymer–polymer friction: relation to adhesion, 63
Adhesive transfer
response of dynamically stressed material in sliding, 269
Al–Si alloy
effects of sliding speed on the unlubricated wear behaviour of Al–12.3wt.%Si alloy, 97
Alloys
effect of layer spacing on wear of Ni/Cu multilayer alloys, 245
effects of sliding speed on the unlubricated wear behaviour of Al–12.3wt.%Si alloy, 97
erosion properties of alloys for the chemical processing industries, 337
tribological properties of titanium alloys, 203
Annular discs
friction behaviour of polyetheretherketone under dry reciprocating movement, 129
Asperites
relationship between normal and tangential contact stiffness of nominally flat surfaces, 49
Austenite
study of the impact fatigue resistance of grinding balls matrices and retained austenite, 13
Automotive engine valve
wear mechanism of high wear-resistant materials for automotive valve trains, 229

Bainitic steels
rolling–sliding wear behavior of three bainitic steels, 255
Birefringence
birefringent studies of polyethylene wear specimens and acetabular cups, 391
Borosity
influence of porosity on friction and sliding wear of tetragonal zirconia polycrystal, 175
Boundary lubrication
wear mechanism of high wear-resistant materials for automotive valve trains, 229

Cavitation
erosion properties of alloys for the chemical processing industries, 337
Ceramic coatings
transitions of microscopic wear mechanism for Cr_2O_3 ceramic coatings during repeated sliding observed in a scanning electron microscope tribosystem, 279
Ceramics
discussion of "Wear mode map of ceramics", by K. Hokkirigawa, 403
wear mode map of ceramics, 219
Chromium
impact deformation and damage of a high chromium white cast iron by spherical projectile at normal incidence, 157
Contact pressures
wear mechanism of high wear-resistant materials for automotive valve trains, 229
Contact stiffness
relationship between normal and tangential contact stiffness of nominally flat surfaces, 49
Copper
effect of layer spacing on wear of Ni/Cu multilayer alloys, 245

Corrosion
effect of microstructure on the erosion–corrosion of steels, 351
degradation of material by fretting stress corrosion, 35
Cr_2O_3 coatings
transitions of microscopic wear mechanism for Cr_2O_3 ceramic coatings during repeated sliding observed in a scanning electron microscope tribosystem, 279
Crack initiation
effect of shot peening on rolling contact fatigue behaviour and its crack initiation and propagation in carburized steel, 77

Deformation
impact deformation and damage of a high chromium white cast iron by spherical projectile at normal incidence, 157
Degradation
degradation of material by fretting stress corrosion, 35

Elastic deformation
relationship between normal and tangential contact stiffness of nominally flat surfaces, 49
Erosion
effect of erodent particle characteristics on the erosion of metals, 381
effect of microstructure on the erosion–corrosion of steels, 351
erosion properties of alloys for the chemical processing industries, 337
on thermomechanical effects during solid particle erosion, 87

Fatigue
response of dynamically stressed material in sliding, 269
Feed rate
effect of erodent particle characteristics on the erosion of metals, 381
Flake formation
discussion of "Wear mode map of ceramics", by K. Hokkirigawa, 403
wear mode map of ceramics, 219
Fluidized bed wear
influence of test parameters on material wastage in a fluidized bed wear test rig, 365

Formation
discussion of "Wear mode map of ceramics", by K. Hokkirigawa, 403
Fretting
degradation of material by fretting stress corrosion, 35
role of oxide particles in the fretting wear of mild steel, 301
Friction
influence of porosity on friction and sliding wear of tetragonal zirconia polycrystal, 175
polymer–polymer friction: relation to adhesion, 63
study of the friction and wear properties of MoS_2-filled Nylon 6, 111

Grinding
effect of grinding direction on the nature of the transfer film formed during the sliding wear of ultrahigh molecular weight polyethylene against stainless steel, 323
Groove wear
monitoring groove wear development in cutting tools via stochastic modelling of three-dimensional vibrations, 143

Halides
tribological properties of titanium alloys, 203

Impact deformation
impact deformation and damage of a high chromium white cast iron by spherical projectile at normal incidence, 157
on thermomechanical effects during solid particle erosion, 87
Impact resistance
study of the impact fatigue resistance of grinding balls matrices and retained austenite, 13
Ion implantation
TiN films prepared on beryllium by ion implantation, 119
Iron
impact deformation and damage of a high chromium white cast iron by spherical projectile at normal incidence, 157

Layer spacing
effect of layer spacing on wear of Ni/Cu multilayer alloys, 245

Magnetic fluid
friction behaviour of polyetheretherketone under dry reciprocating movement, 129
Mass
effect of erodent particle characteristics on the erosion of metals, 381
Material hardness
explanation of the relation between wear and material hardness in three-body abrasion, 313
Metal wastage
influence of test parameters on material wastage in a fluidized bed wear test rig, 365
Metals
effect of erodent particle characteristics on the erosion of metals, 381
Microhardness
TiN films prepared on beryllium by ion implantation, 119
Microstructures
abrasion-induced microstructural changes during low stress abrasion of a plain carbon (0.5% C) steel, 1
effect of microstructure on the erosion–corrosion of steels, 351
influence of porosity on friction and sliding wear of tetragonal zirconia polycrystal, 175
MoS_2-filled Nylon
study of the friction and wear properties of MoS_2-filled Nylon 6, 111
Multilayer
effect of layer spacing on wear of Ni/Cu multilayer alloys, 245

Nickel
effect of layer spacing on wear of Ni/Cu multilayer alloys, 245
Nylon 6
study of the friction and wear properties of MoS_2-filled Nylon 6, 111

Oxide debris
role of oxide particles in the fretting wear of mild steel, 301

Plastic deformation
relationship between normal and tangential contact stiffness of nominally flat surfaces, 49
Ploughing
discussion of "Wear mode map of ceramics", by K. Hokkirigawa, 403
wear mode map of ceramics, 219
Polyethylene
birefringent studies of polyethylene wear specimens and acetabular cups, 391
Polymer
polymer–polymer friction: relation to adhesion, 63
Powder formation
discussion of "Wear mode map of ceramics", by K. Hokkirigawa, 403
wear mode map of ceramics, 219

Repeated sliding
transitions of microscopic wear mechanism for Cr_2O_3 ceramic coatings during repeated sliding observed in a scanning electron microscope tribosystem, 279
Rolling
rolling–sliding wear behavior of three bainitic steels, 255
wear mechanism of silicon nitride in rolling–sliding contact, 291
Rolling contact fatigue
effect of shot peening on rolling contact fatigue behaviour and its crack initiation and propagation in carburized steel, 77

Shape
effect of erodent particle characteristics on the erosion of metals, 381
Shot peening
effect of shot peening on rolling contact fatigue behaviour and its crack initiation and propagation in carburized steel, 77
Silicon nitride
wear mechanism of silicon nitride in rolling–sliding contact, 291
Size impact velocity
effect of erodent particle characteristics on the erosion of metals, 381
Sliding
discussion of "Wear mode map of ceramics", by K. Hokkirigawa, 403
effect of grinding direction on the nature of the transfer film formed during the sliding wear of ultrahigh molecular weight polyethylene against stainless steel, 323

effects of sliding speed on the unlubricated wear behaviour of Al–12.3wt.%Si alloy, 97
response of dynamically stressed material in sliding, 269
rolling–sliding wear behavior of three bainitic steels, 255
simple approach to calculation of the sliding wear coefficient for medium carbon steels, 23
transitions of microscopic wear mechanism for Cr_2O_3 ceramic coatings during repeated sliding observed in a scanning electron microscope tribosystem, 279
wear mechanism of silicon nitride in rolling–sliding contact, 291
Sliding wear
influence of porosity on friction and sliding wear of tetragonal zirconia polycrystal, 175
Slurry erosion
erosion properties of alloys for the chemical processing industries, 337
Solid particle impingement
erosion properties of alloys for the chemical processing industries, 337
Squeeze film behaviour
friction behaviour of polyetheretherketone under dry reciprocating movement, 129
Stainless steel
effect of grinding direction on the nature of the transfer film formed during the sliding wear of ultrahigh molecular weight polyethylene against stainless steel, 323
Steel
abrasion-induced microstructural changes during low stress abrasion of a plain carbon (0.5% C) steel, 1
effect of grinding direction on the nature of the transfer film formed during the sliding wear of ultrahigh molecular weight polyethylene against stainless steel, 323
effect of microstructure on the erosion–corrosion of steels, 351
effect of shot peening on rolling contact fatigue behaviour and its crack initiation and propagation in carburized steel, 77
role of oxide particles in the fretting wear of mild steel, 301
rolling–sliding wear behavior of three bainitic steels, 255
simple approach to calculation of the sliding wear coefficient for medium carbon steels, 23

Thermomechanical effects
on thermomechanical effects during solid particle erosion, 87
Three-body abrasion
explanation of the relation between wear and material hardness in three-body abrasion, 313
TiN films
TiN films prepared on beryllium by ion implantation, 119
Titanium
tribological properties of titanium alloys, 203

Ultrahigh molecular weight polyethylene
effect of grinding direction on the nature of the transfer film formed during the sliding wear of ultrahigh molecular weight polyethylene against stainless steel, 323

Wear limits
wear mechanism of high wear-resistant materials for automotive valve trains, 229
Weight loss
explanation of the relation between wear and material hardness in three-body abrasion, 313

Zirconia
influence of porosity on friction and sliding wear of tetragonal zirconia polycrystal, 175